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(54) Title: METHOD OF ISOLATING AND CULTURING MESENCHYMAL STEM CELL DERIVED FROM CRYOPRE-
SERVED UMBILICAL CORD BLOOD



(57) Abstract: The present invention relates to a method of isolating and
culturing mesenchymal stem cells using cryopreserved umbilical cord
blood that is most ideal for cell therapy. The method comprises thawing
cryopreserved umbilical cord blood and adding α MEM (alpha-minimum
essential medium) thereto, followed by centrifugation to harvest
monocytes; isolating CD133 positive cells from the obtained monocytes;
and subjecting the isolated cells into suspension culture in the α MEM
containing Stem Cell Factor, GM-CSF (granulocyte-macrophage
colony-stimulating factor), G-CSF (granulocyte colony-stimulating
factor), IL-3 (interleukin-3) and IL-6 (interleukin-6).

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